

OMB SUPPORTING STATEMENT FOR
PROPOSED RULE REVISIONS TO 10 CFR PART 51
ENVIRONMENTAL REVIEW FOR RENEWAL OF
NUCLEAR POWER PLANT OPERATING LICENSES

(OMB Clearance No. 3150-0021)

REVISION

DESCRIPTION OF THE INFORMATION COLLECTION

As mandated by the Atomic Energy Act (AEA) of 1954, as amended, the U.S. Nuclear Regulatory Commission (NRC) is responsible for protecting public health and safety in the civilian use of nuclear power. The NRC Office of Nuclear Reactor Regulation (NRR) is responsible for ensuring the public health and safety through the licensing and inspection of activities at all commercial nuclear power reactor facilities in the U.S. The AEA allows the NRC to issue licenses for commercial power reactors to operate for up to 40 years. NRC regulations allow for the renewal of these licenses, the renewal term to include any remaining number of years on the operating license or combined license currently in effect plus an additional 20 years. The approval or disapproval of the license renewal application turns upon an NRC determination as to whether the nuclear facility can continue to operate safely during the 20-year period of extended operation. The term of any renewed license may not exceed 40 years. No specific limitations exist in the Atomic Energy Act or in NRC's regulations on the number of times a power reactor operating license may be renewed.

As a federal agency, the NRC is subject to the National Environmental Policy Act (NEPA). The NRC's environmental protection regulations in 10 CFR Part 51 identify the renewal of a nuclear power plant operating license as a major federal action significantly affecting the quality of the human environment. As such, a supplemental environmental impact statement (SEIS) is required for a plant license renewal review in accordance with NEPA. As part of the operating license renewal process, the NRC prepared in 1996 the *Generic Environmental Impact Statement for License Renewal of Nuclear Plants* (GEIS), NUREG-1437, to assist staff in preparing SEISs.

The purpose of the GEIS is to identify and generically address issues and processes that are common to all nuclear power plants and have the same or similar environmental impacts (Category 1 issues). The GEIS also identifies issues and processes that are unique to each nuclear power plant, require site-specific information, have different impacts, and are addressed separately in site-specific SEISs (Category 2 issues). The findings of the GEIS are codified in Table B-1 of Appendix B to Subpart A of 10 CFR Part 51.

The NRC's regulations in 10 CFR Part 51.53(c) require each applicant to prepare and submit a report entitled "Applicant's Environmental Report – Operating License Renewal Stage," with the applicant's license renewal application. The information provided by an applicant in the environmental report (ER) helps the NRC meet its regulatory obligations under NEPA. In the ER, the applicant provides information about the plant, the environment that could be affected by license renewal, and an assessment of the environmental impacts identified as Category 2 issues in Table B-1 in Appendix B to Subpart A to 10 CFR Part 51. The applicant also is required to include descriptive information and any new and significant impact information for Category 1 issues in Table B-1.

The GEIS was published as a Final Rule on December 18, 1996 (61 FR 66537). In Appendix B to Subpart A of 10 CFR Part 51, the Commission stated its intent to review the findings in Appendix B on a 10-year cycle and to update the requirements if necessary. The proposed rule revisions are the result of the 10-year review conducted by the NRC on the information and findings currently presented in Table B-1 and are based on lessons learned and knowledge gained from previous license renewal reviews

A. JUSTIFICATION

1. Need for and Practical Utility of the Collection of Information

NEPA directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in NEPA, and (2) all agencies of the Federal Government shall comply with the procedures in Section 102(2) of NEPA except where compliance would be inconsistent with other statutory requirements. The regulations in Subpart A of 10 CFR Part 51 implement Section 102(2) of NEPA in a manner that is consistent with the NRC's domestic licensing and related regulatory authority under the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, the Uranium Mill Tailings Radiation Control Act of 1978, and the Commission's announced policy to take account of the regulations of the Council of Environmental Quality published November 29, 1978 (43 FR 55978-56007). In order to conduct the environmental (NEPA) review of licensing actions, NRC requires applicants to collect recent environmental information about their nuclear power plants.

NRC's regulations in 10 CFR Part 51.53(c) require each applicant to prepare and submit a report entitled "Applicant's Environmental Report – Operating License Renewal Stage," with the applicant's license renewal application. The information provided by an applicant in the environmental report (ER) helps the NRC meet its regulatory obligations consistent with Section 102(2) of NEPA. In the ER, the applicant provides information about the plant, the environment that could be affected by license renewal, and an assessment of the environmental impacts identified as Category 2 issues in Table B-1 in Appendix B to Subpart A to 10 CFR Part 51. The applicant also is required to include descriptive information and any new and significant impact information for Category 1 issue in Table B-1.

After evaluating the license renewal application and ER, the NRC will prepare a draft supplemental EIS (SEIS) to analyze those plant-specific (Category 2) issues. Neither the SEIS nor the ER is required to cover Category 1 issues. However, both are required to consider any new and significant information for Category 1 or unidentified issues. The draft SEIS is made available for public comment. After considering public comments, the NRC will prepare and issue the final SEIS in accordance with 10 CFR 51.91 and 51.93. The final SEIS and NUREG-1437, together, serve as the requisite NEPA analysis for any given license renewal application.

Exhibit 1 presents the proposed changes to Table B-1 in Appendix B to Subpart A to 10 CFR Part 51. The changes to Table B-1 consist of four types:

- **New Table B-1 Issue (Category 1).** The NRC has addressed the environmental impacts of these new Category 1 issues generically for all plants in the revised GEIS. For each new Category 1 issue, the license renewal applicant must include within its ER any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware (see 10 CFR 51.53(c)(iv)). The NRC would then evaluate and consider any such information in its site-specific supplemental environmental impact statement

(SEIS) for that plant. If the applicant determines that no new and significant information exists that would change the conclusion in the GEIS, the applicant would provide a statement of this determination in the ER.

- **New or Expanded Table B-1 Issue (Category 2).** A license renewal applicant will incur an increase in burden for each new or expanded Category 2 impact issue listed in Table B-1. For each new or expanded Category 2 issue, the applicant must include in its ER a site specific assessment of the environmental impacts related to that issue. In addition, for each new or expanded Category 2 issue, the applicant must include in its ER a discussion of possible actions to mitigate any adverse impacts associated with license renewal and environmental impacts of alternatives to license renewal. Similarly, the NRC will incur an increase in burden as it must analyze the environmental impacts related to each new or expanded Category 2 issue in its SEIS.
- **Existing Table B-1 Issue – Category Change (Category 2 to Category 1).** A license renewal applicant would no longer be required to conduct a site specific analysis on the environmental impacts associated with a Table B-1 issue that has been changed from Category 2 to Category 1. This type of change would result in a burden reduction because each applicant would no longer be required to conduct a site-specific analysis of the potential environmental impacts related to that issue. An applicant only would be required to determine if any “new and significant information” existed regarding any potential environmental impact. If new and significant information was discovered, the applicant would include an assessment of the environmental impacts in the ER. If the applicant determined that no new and significant information existed that would change the conclusion in the GEIS, the applicant would provide a statement of this determination in the ER.
- **Existing Table B-1 Issue – Category Change (Category 1 to Category 2).** An applicant will incur an increase in burden for each Category 1 issue that is changed to a Category 2 issue in the proposed rule revisions. An applicant that previously did not have to provide a site-specific analysis on the environmental impacts associated with this issue now would be required to do so. The results of the applicant’s assessment would be included in its ER. The assessment also must include a discussion of possible actions to mitigate any adverse impacts associated with license renewal and environmental impacts of alternatives to license renewal in the ER. The NRC will incur an increase in burden as it must analyze the environmental impacts related to each new Category 2 issue in its SEIS.

2. Agency Use of the Information

The NRC evaluates the information provided in the license renewal application and ER and prepares a draft SEIS to analyze plant-specific issues (Category 2) for any new and significant information for Category 1 or unidentified issues. After considering public comments, the NRC prepares and issues the final SEIS in accordance with 10 CFR 51.91 and 51.93. The final SEIS and NUREG-1437, together, serve as the requisite NEPA analysis for any given license renewal application.

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58792), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and

members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface, or other means. It is estimated that 100 percent of license renewal applications will be submitted to the NRC electronically.

4. Effort to Identify Duplication and Use Similar Information

No sources of similar information are available. There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

This information collection does not affect small businesses.

6. Consequences to Federal Program or Policy Activities if the Collection is Not Conducted or is Conducted Less Frequently

The environmental information collected by the applicant and included in the ER is affected by the proposed rule changes to Table B-1 in Appendix B to Subpart A to 10 CFR Part 51. The information provided in the ER is used by the NRC to conduct an assessment of the environmental impacts that could result from the renewal of the operating license and the continued operation of the nuclear power plant. The NRC then completes the environmental review and documents the results in a site-specific SEIS in compliance with NEPA.

Without the information collected as a result of the proposed changes to Table B-1, the NRC could not complete the environmental review in a timely manner which could delay the overall completion of a license review. Delays in the environmental review process likely would increase the cost burden to both industry and to the NRC because additional time would be required for the licensee to collect and provide missing information to the NRC and for the NRC to conduct supplemental analyses on the additional information provided.

7. Circumstances Which Justify Variation from OMB Guidelines

There is no variation from OMB guidelines.

8. Consultations Outside the NRC.

The opportunity for public comment on the information collection requirements for this rulemaking package has been published in the Federal Register.

9. Payment or Gifts to Respondents

Not applicable.

10. Confidentiality of Information

Confidential and proprietary information is protected in accordance with NRC regulations at 10 CFR 9.17(a) and 10 CFR 2.390(b). However, no information normally considered confidential or proprietary is requested.

11. Justification for Sensitive Questions

Not applicable.

12. Estimated Industry Burden and Burden Hour Cost

a. Reporting Burden and Cost

The burden associated with this information collection is presented in Table 1 for the one-time reporting burden to industry. No annual burden will result from this information collection. This estimate of burden addresses only the burden of the revision and amendments to the existing rule that affect the information collection requirements. These estimates are based on estimates made by NRC personnel who are familiar with the required information.

The net-one-time reporting burden (annualized) for the proposed rulemaking is 1,944 hours at a cost of \$462,672 (1,944 hours x \$238/hour).

b. Recordkeeping Burden and Cost

Recordkeeping requirements are not specified in 10 CFR Part 51.

13. Estimate of Other Additional Cost

None.

14. Estimated Annualized Cost to the Federal Government

Table 2 describes the estimated one-time cost to the NRC for the proposed updates and amendments to Table B-1. The change in burden to the NRC is associated with staff environmental reviews of the ER submitted by each applicant as part of the license renewal application.

The net-one-time reporting burden (annualized) for the proposed rulemaking is 1,070.4 hours at a cost of \$254,755 (1,070.4 hours x \$238/hour).

This cost is fully recovered through fee assessments to NRC licensees pursuant 10 CFR 170 or 171.

15. Reasons for Change in Burden

- Burden Increases. The estimated burden of 2,568 hours for one-time reporting (annualized) represents an increase in reporting requirements that must be included in the applicant's ER due to changes made to Table B-1 (e.g., creating new Category 1 and 2 Issues; additional information requirements added to some Category 2 Issues; changing some issues from Category 1 to Category 2).
- Burden Decreases. The estimated burden of 624 hours for one-time reporting (annualized) represents a reduction in reporting requirements due to changes made to Table B-1 (i.e., changing some issues from Category 2 to Category 1).

- Net-one-time reporting (annualized) industry burden:
1,944 hours (2,568 hours – 624 hours) at a cost of \$462,672.

16. Publication for Statistical Use

None.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations to display information that, in an annual publication, could become obsolete, and would be unduly burdensome and too difficult to keep current.

18. Exceptions to the Certification Statement

None.

B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

Statistical methods are not used in this collection of information.

Attachments:

- Table 1—One-Time Reporting Burden (Annualized) – Industry (2011-2013)
- Table 2—One-Time Reporting Burden (Annualized) – NRC (2011-2013)

Exhibit 2-1 - Presentation of Proposed Rule Changes to Table B-1

Table B-1 - Proposed Revisions		Table B-1 (10 CFR Part 51) - Current Rule		Summary of Proposed Change
Issue	Finding	Issue	Finding	
Land Use				
Offsite land use	Small impact (Category 1). Offsite land use would not be affected from continued operations and refurbishment associated with the license renewal term.	Offsite land use (refurbishment)	Small or moderate (Category 2). Impacts may be of moderate significance at plants in low population areas.	<ul style="list-style-type: none"> Issue consolidation (organizational change). Change Issues from Category 2 to Category 1.
		Offsite land use (license renewal term)	Small, moderate, or large (Category 2). Significant changes in land use may be associated with population and tax revenue changes resulting from license renewal.	
Geology and Soils				
Impacts of plants on geology and soils	Small impact (Category 1). Impacts on geology and soils (prime farmland) would be small at all plants if best management practices were employed to reduce erosion associated with continued operations and refurbishment.	Not addressed.	Not addressed.	<ul style="list-style-type: none"> New Category 1 Issue.
Surface Water				
Effects of dredging on water quality	Small impact (Category 1). Dredging to remove accumulated sediments in the vicinity of intake and discharge structures and to maintain barge shipping has not been found to be a problem for surface water quality. Dredging is performed under permit from the U.S. Army Corps of Engineers.	Not addressed.	Not addressed.	<ul style="list-style-type: none"> New Category 1 Issue.

Table B-1 - Proposed Revisions		Table B-1 (10 CFR Part 51) - Current Rule		Summary of Proposed Change
Issue	Finding	Issue	Finding	
Ground Water				
Groundwater and soil contamination	Small or moderate impact (Category 2). Industrial practices involving the use of solvents, hydrocarbons, heavy metals, or other chemicals and unlined waste-water lagoons have the potential to contaminate site groundwater, soil, and subsoil. Contamination is subject to State- and EPA-regulated cleanup and monitoring programs.	Not addressed.	Not addressed.	<ul style="list-style-type: none"> New Category 2 Issue.
Radionuclides released to groundwater	Small or moderate impact (Category 2). Underground system leaks of process water have been discovered in recent years at several plants. Groundwater protection programs to have been established at all operating nuclear power plants.	Not addressed.	Not addressed.	<ul style="list-style-type: none"> New Category 2 Issue.
Terrestrial Resources				
Exposure of terrestrial organisms to radionuclides	Small impact (Category 1). Doses to terrestrial organisms are expected to be well below exposure guidelines developed to protect these organisms.	Not addressed.	Not addressed.	<ul style="list-style-type: none"> New Category 1 Issue.
Aquatic Resources				
Exposure of aquatic organisms to radionuclides	Small impact (Category 1). Doses to aquatic organisms are expected to be well below exposure guidelines developed to protect these organisms.	Not addressed.	Not addressed.	<ul style="list-style-type: none"> New Category 1 Issue.

Table B-1 - Proposed Revisions		Table B-1 (10 CFR Part 51) - Current Rule		Summary of Proposed Change
Issue	Finding	Issue	Finding	
Effects of dredging on aquatic resources	Small impact (Category 1). Impacts of dredging on aquatic resources are relatively short-term and localized. Such activities would require permits from the USACE, State environmental agencies, or other applicable regulatory authorities.	Not addressed.	Not addressed.	<ul style="list-style-type: none"> New Category 1 Issue.
Thermal impacts on aquatic organisms (plants with once-through cooling systems or cooling ponds)	Small, moderate, or large impact (Category 2). Most of the effects associated with thermal discharges are localized and are not expected to affect overall stability of populations or resources. The magnitude of impacts, however, would depend on site-specific thermal plume characteristics and the nature of aquatic resources in the area.	Cold shock (all plants)	Small (Category 1). Cold shock has been satisfactorily mitigated at operating nuclear plants with once-through cooling systems, has not endangered fish populations or been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds, and is not expected to be a problem during the license renewal term.	<ul style="list-style-type: none"> Issue consolidation (organizational change). Change Issue from Category 1 to Category 2.
		Thermal plume barrier to migrating fish (all plants)	Small (Category 1). Thermal plumes have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.	<ul style="list-style-type: none"> Issue consolidation (organizational change). Change Issue from Category 1 to Category 2.
		Heat shock (plants with once-through and cooling-pond heat dissipation systems)	Small, moderate, or large (Category 2). Because of continuing concerns about heat shock and the possible need to modify thermal discharges in response to changing environmental conditions, the impacts may be of moderate or large significance at some plants. See § 51.53(c)(3)(ii)(B).	<ul style="list-style-type: none"> Issue consolidation (organizational change).

Table B-1 - Proposed Revisions		Table B-1 (10 CFR Part 51) - Current Rule		Summary of Proposed Change
Issue	Finding	Issue	Finding	
		Distribution of aquatic organisms (all plants)	Small (Category 1). Thermal discharge may have localized effects but is not expected to affect the larger geographical distribution of aquatic organisms.	<ul style="list-style-type: none"> Issue consolidation (organizational change). Change Issue from Category 1 to Category 2.
		Premature emergence of aquatic insects (all plants)	Small (Category 1). Premature emergence has been found to be a localized effect at some operating nuclear power plants but has not been a problem and is not expected to be a problem during the license renewal term.	<ul style="list-style-type: none"> Issue consolidation (organizational change). Change Issue from Category 1 to Category 2.

Table B-1 - Proposed Revisions		Table B-1 (10 CFR Part 51) - Current Rule		Summary of Proposed Change
Issue	Finding	Issue	Finding	
Impacts of transmission line ROW management on aquatic resources	Small impact (Category 1). Application of best management practices to ROW near aquatic systems would reduce the potential for impacts.	Not addressed.	Not addressed.	<ul style="list-style-type: none"> New Category 1 Issue.
Threatened and Endangered Species and Essential Fish Habitat				
Threatened and endangered species including special status aquatic species and habitats	Small, moderate, or large impact (Category 2). The magnitude of impacts on threatened and endangered species and special status aquatic species and habitats would depend on the occurrence of listed species and habitats and the interaction between plant systems and those species and habitats. Consultation with appropriate agencies would be needed to determine whether special status species or habitats are present and whether they would be adversely affected by activities associated with license renewal.	Threatened or endangered species (all plants)	Small, moderate, or large (Category 2). Generally, plant refurbishment and continued operation are not expected to adversely affect threatened or endangered species. However, consultation with appropriate agencies would be needed at the time of license renewal to determine whether threatened or endangered species are present and whether they would be adversely affected.	<ul style="list-style-type: none"> Modification of Category 2 impact to include provisions to address the Magnuson-Stevens Fishery Conservation and Management Act as amended (10/11/96).

Table B-1 - Proposed Revisions		Table B-1 (10 CFR Part 51) - Current Rule		Summary of Proposed Change
Issue	Finding	Issue	Finding	
Socioeconomics				
Tax revenues	<p>Small impact (Category 1). Nuclear plants provide tax revenue to local jurisdictions in the form of property tax payments, payments-in-lieu-of-tax (PILOT) payments, or tax payments on energy production. The amount of tax revenue paid during the license renewal term from continued operations and refurbishment is not expected to change, since the assessed value of the power plant, payments on energy production and PILOT payments are also not expected to change.</p>	<p>Not addressed.</p> <p>Considered in the 1996 GEIS, but not identified as an issue.</p>	Not addressed.	<ul style="list-style-type: none"> New Category 1 Issue.

Table B-1 - Proposed Revisions		Table B-1 (10 CFR Part 51) - Current Rule		Summary of Proposed Change
Issue	Finding	Issue	Finding	
Community services and education	Small impact (Category 1). Changes to local community and educational services would be small from continued operations and refurbishment associated with the license renewal term. With no increase in employment, value of the power plant, payments on energy production, and PILOT payments expected during the renewal term, community and educational services would not be affected by continued power plant operations. Changes in employment and tax payments would have a greater effect on jurisdictions receiving a large portion of annual revenues from the power plant than jurisdictions receiving the majority of their revenues from other sources.	Public services: public safety, and social services	Small (Category 1). Impacts on public safety, social services are expected to be of small significance at all sites.	<ul style="list-style-type: none"> Issue consolidation (organizational change).
		Public services: public utilities	Small or moderate (Category 2). An increased problem with water shortages at some sites may lead to impacts of moderate significance on public water supply availability.	<ul style="list-style-type: none"> Change Issue from Category 2 to Category 1.
		Public services, education (license renewal term)	Small (Category 1). Only impacts of small significance are expected.	<ul style="list-style-type: none"> Issue consolidation (organizational change).
		Public services, education (refurbishment)	Small, moderate, or large (Category 2). Most sites would experience impacts of small significance, but larger impacts are possible depending on site- and project-specific factors.	<ul style="list-style-type: none"> Change Issue from Category 2 to Category 1.

Table B-1 - Proposed Revisions		Table B-1 (10 CFR Part 51) - Current Rule		Summary of Proposed Change
Issue	Finding	Issue	Finding	
Population and Housing	Small impact (Category 1). Changes to regional population and housing availability and value would be small from continued operations and refurbishment associated with the license renewal term. With no increase in employment expected during the license renewal term, population and housing availability and values would not be affected by continued power plant operations. Changes in housing availability and value would have a greater effect on sparsely populated areas than areas with higher density populations.	Housing impacts	<p>Small, moderate, or large (Category 2). Housing impacts are expected to be of small significance at plants located in a medium- or high-population area and not in an area where growth control measures that limit housing development are in effect.</p> <p>Moderate or large housing impacts of the workforce associated with refurbishment may be associated with plants located in sparsely populated areas or in areas with growth control measures that limit housing development.</p>	<ul style="list-style-type: none"> Change Issue from Category 2 to Category 1.

Table B-1 - Proposed Revisions		Table B-1 (10 CFR Part 51) - Current Rule		Summary of Proposed Change
Issue	Finding	Issue	Finding	
Transportation Impacts	Small impact (Category 1). Changes to traffic volumes would be small from continued operations and refurbishment activities associated with the license renewal term. Changes in employment would have a greater effect on rural areas, with less developed local and regional networks. Impacts would be less noticeable in semi-urban areas depending on the quality and extent of local access roads and the timing of plant shift changes when compared to typical local usage.	Public services, transportation	Small, moderate, or large (Category 2). Transportation impacts are generally expected to be of small significance. However, the increase in traffic associated with the additional workers and the local road and traffic control conditions may lead to impacts of moderate or large significance at some sites.	<ul style="list-style-type: none"> Change Issue from Category 2 to Category.
Human Health				
Human health impact from chemicals	Small impact (Category 1). Chemical hazards to workers would be minimized by observing good industrial hygiene practices. Chemical releases to the environment and the potential for impacts to the public are minimized by the application of best management practices and adherence to discharge limitations of NPDES permits.	Not addressed.	Not addressed.	<ul style="list-style-type: none"> New Category 1 Issue.

Table B-1 - Proposed Revisions		Table B-1 (10 CFR Part 51) - Current Rule		Summary of Proposed Change
Issue	Finding	Issue	Finding	
Physical occupational hazards	Small impact (Category 1). The occupational safety and health hazards are generic to all types of electrical generating stations, including nuclear power plants, and is of small significance if the workers adhere to safety standards and use protective equipment.	Not addressed.	Not addressed.	<ul style="list-style-type: none"> New Category 1 Issue.
Environmental Justice				
Minority and low-income populations	Small or moderate impact (Category 2). Impacts to minority and low-income populations and subsistence consumption will be addressed in plant-specific reviews. See NRC Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions (69 FR 52040).	Environmental justice	None. The need for and the content of an analysis of environmental justice will be addressed in plant-specific reviews.	<ul style="list-style-type: none"> New Category 2 Issue.
Cumulative Impacts				
Cumulative impacts	(Category 2). Cumulative impacts of license renewal must be considered on a plant-specific basis. Impacts will depend on regional resource characteristics, the resource-specific impacts of license renewal, and the cumulative significance of other factors affecting the resource.	Not addressed.	Not addressed.	<ul style="list-style-type: none"> New Category 2 Issue.

Table 1
One-Time Reporting Burden (Annualized) – Industry (2011 – 2013)

Table B-1 Issues	Responses per Respondent	Total Responses	Burden Hours per Response	Total Annual Burden Hours	Cost @ \$238/hr
INDUSTRY - BURDEN INCREASE					
Impacts of plants on geology and soils	0.33	6.00	32.0	192.0	\$ 45,696
Effects of dredging on water quality	0.33	6.00	16.0	96.0	\$ 22,848
Groundwater and soil contamination	0.33	6.00	32.0	192.0	\$ 45,696
Radionuclides released to groundwater	0.33	6.00	32.0	192.0	\$ 45,696
Exposure of terrestrial organisms to radionuclides	0.33	6.00	24.0	144.0	\$ 34,272
Exposure of aquatic organisms to radionuclides	0.33	6.00	24.0	144.0	\$ 34,272
Effects of dredging on aquatic resources	0.33	6.00	16.0	96.0	\$ 22,848
Thermal impacts on aquatic organisms (plants with once-through cooling systems or cooling ponds)	0.33	6.00	24.0	144.0	\$ 34,272
Impacts of transmission line ROW	0.33	6.00	8.0	48.0	\$ 11,424

management on aquatic resources					
Threatened and endangered species including special status aquatic species and habitats	0.33	0.60	40.0	24.0	\$ 5,712
Employment and income, recreation and tourism	0.33	6.00	24.0	144.0	\$ 34,272
Tax revenues	0.33	6.00	24.0	144.0	\$ 34,272
Human health impact from chemicals	0.33	6.00	24.0	144.0	\$ 34,272
Physical occupational hazards	0.33	6.00	24.0	144.0	\$ 34,272
Minority and low-income populations	0.33	6.00	40.0	240.0	\$ 57,120
Cumulative impacts	0.33	6.00	80.0	480.0	\$ 114,240
Subtotal - Industry Burden Increase				2,568.0	\$ 611,184
INDUSTRY - BURDEN DECREASE					
Offsite land use	0.33	6.00	32.0	192.0	\$ 5,696
Community services and education	0.33	6.00	24.0	144.0	\$ 34,272
Population and Housing	0.33	6.00	24.0	144.0	\$ 34,272
Transportation Impacts	0.33	6.00	24.0	144.0	\$ 34,272
Subtotal - Industry Burden Decrease				624.0	\$ 148,512
Total Industry Burden Increase				1,944.0	\$ 462,672

**Table 2
One-Time Reporting Burden (Annualized) – NRC (2011 – 2013)**

Table B-1 Issues	Responses per Respondent	Total Responses	Burden Hours per Response	Total Annual Burden Hours	Cost @ \$238/hr
NRC - BURDEN INCREASE					
Impacts of plants on geology and soils	0.33	6.00	16.0	96.0	\$ 22,848
Effects of dredging on water quality	0.33	6.00	16.0	96.0	\$ 22,848
Groundwater and soil contamination	0.33	6.00	24.0	144.0	\$ 34,272
Radionuclides released to groundwater	0.33	6.00	16.0	96.0	\$ 22,848
Exposure of terrestrial organisms to radionuclides	0.33	6.00	8.0	48.0	\$ 11,424
Exposure of aquatic organisms to radionuclides	0.33	6.00	8.0	48.0	\$ 11,424
Effects of dredging on aquatic resources	0.33	6.00	8.0	48.0	\$ 11,424
Thermal impacts on aquatic organisms (plants with once-through cooling systems or cooling ponds)	0.33	6.00	8.0	48.0	\$ 11,424
Impacts of transmission line ROW management on aquatic resources	0.33	6.00	8.0	48.0	\$ 11,424
Threatened and endangered species including special status aquatic species and habitats	0.33	0.60	24.0	14.4	\$ 3,427
Employment and income, recreation and tourism	0.33	6.00	8.0	48.0	\$ 11,424
Tax revenues	0.33	6.00	8.0	48.0	\$ 11,424
Human health impact from chemicals	0.33	6.00	8.0	48.0	\$ 11,424
Physical occupational hazards	0.33	6.00	8.0	48.0	\$ 11,424
Minority and low-income populations	0.33	6.00	16.0	96.0	\$ 22,848
Cumulative impacts	0.33	6.00	56.0	336.0	\$ 79,968
Subtotal - NRC Burden Increase				1,310.4	\$ 311,875
NRC - BURDEN DECREASE					
Offsite land use	0.33	6.00	16.0	96.0	\$ 22,848
Community services and education	0.33	6.00	8.0	48.0	\$ 11,424
Population and Housing	0.33	6.00	8.0	48.0	\$ 11,424
Transportation Impacts	0.33	6.00	8.0	48.0	\$ 11,424
Subtotal - NRC Burden Decrease				240.0	\$ 57,120
Total NRC Burden Increase				1,070.4	\$ 254,755